

that she attributes her extraordinary vice of conformation, to the influence of maternal imagination during utero-gestation.

He says that he, also, has never been able to wear either socks or shoes, in consequence of which he suffers much during the winter season, and is very desirous to have the extra toes taken off. On examination I found that the supernumerary great toe on the right foot, came out or stood off at a right angle with the foot and toes (*see fig.*)—that it had, like a natural toe, two phalanges, but had no tendon or muscle extending to it, and of course the will had no influence on it; but what is more remarkable, the shape of the toe-nail, &c. had more the appearance of a thumb than a toe.

The extra great toe on the left foot differed from the right in coming out at a more acute angle, and having more the appearance of a natural toe. There was nothing peculiar about the extra little toes, except that they had no muscles extending to them. The feet were somewhat shorter and wider, particularly across the toes, than usual.

I amputated both of the great toes, on the morning of the 23d, at their articulations with their metatarsal bones; there was very little hemorrhage, and the patient did not suffer much pain from the operation.

The lips of the wounds were approximated and held in situ with adhesive strips; they healed partially by the first intention—the patient suffering little or no subsequent pain, and on the 4th of July he walked home, a distance of twelve miles, his feet being nearly or quite well, having on, for the first time in his life, shoes and stockings, and much gratified with the improved appearance of his feet.

Wilkesboro, N. C., Aug. 22d, 1843.



Extreme width from *a* to *b*, 5½ inches. Extreme length from *c* to *d*, 8½ in. Breadth of the plantar surface of the toes 4 inches, from *e* to *f*.

DOMESTIC SUMMARY.

Induction of Premature Labour, without Rupture of the Membranes.—DR. HENRY G. CLARK reported to the Boston Society for Medical Improvement, Nov. 28, 1842, the following interesting case of induction of premature labour:—

“Mrs. S., æt. 30, from St. John, N. B., consulted me in May last; she was pregnant with her sixth child, and had always great difficulty in labour, only one of the five having been born alive, and that at 7 months, a female, now living, and 10 years of age.

“I had myself attended in her fourth confinement in 1837. I then found her to have a pelvis contracted in its conjugate diameter to less than 3 inches, by the projection of the promontory of the sacrum. She is short, of awkward figure, and has also lateral curvature of the spine. It became necessary to resort to perforation of the head at that time—delivery being otherwise impossible.

“At her last confinement, two and a half years since, she went to her native town, where, she informs me, it was thought proper by her attendants there, after three days sickness, to have recourse to the same measures. She did not recover from this for some months.

“It seemed to me that this was a proper case for the induction of premature labour. I therefore proposed it to her as the safest course for herself—as the

only one for the child. She readily consented to submit to this or any other procedure which might be deemed necessary.

"Nov. 22d. Dr. Townsend saw her this day in consultation, and confirmed my opinion.

"I proposed to myself the following method, viz.: 1st, to remove the viscid mucus which is found about the cervix uteri, and to dilate and irritate the parts moderately by the fingers, at certain intervals, until some effect should be produced. In addition, if this should not be sufficient to bring on the first stage of labour, to use the ointment of belladonna, and 2dly, as soon as this should be accomplished, to exhibit, at regular periods, small doses of ergot to excite natural uterine action.

"The last menstrual period was passed March 25th, so that she had now progressed nearly eight months.

"This morning, ordered a brisk cathartic. In the evening, I called again and made an examination. The finger was insinuated into the os uteri, and the secretions thoroughly removed. Considerable pain was excited by this operation, which continued at intervals for an hour, and then ceased.

"Nov. 23d, 9 A. M. Patient slept well all night, and has no pain to-day. Upon examination, the os uteri was found to be more relaxed than last night, and readily admitted two fingers to be passed to the membranes. They were retained there, and the dilatation persevered in for 15 or 20 minutes. By this manipulation, two or three slight but distinct propulsive pains were produced. Pain continued after this more or less for three hours, but with no further bearing down. 10 P. M., os uteri more dilatable, and accompanied with some shortening of the cervix. Membranes easily felt, and, by the ballottement, what I suppose to be the head of the child.

"The dilatation now seemed to be sufficient to warrant the exhibition of the ergot—ten grains were accordingly given in decoction.

"24th. Patient reports violent pains in the back, loins and hips all night. None in abdomen. These pains have now abated and she is quite easy. Dilatation increased a little. Directed her to rest until 2 o'clock, and then to take 5 grains of ergot, and to repeat the same dose at 5 P. M. Regular propulsive pains came on at 6 o'clock, and continued until the labour was safely accomplished at 1 A. M. The infant was a lively boy, weighing 6½ lbs. The waters were not discharged until a little after midnight. The head, notwithstanding its small size, and in spite of remarkably strong pains, was firmly lodged in the narrowed upper strait for an hour and a half after the os uteri was well dilated, and showed marks of severe treatment during its passage. It was not at all ergotized.

"Dec. Mother and child well.

"In this case, I believe either of the methods usually practised would have been unsuccessful. If the membranes had been ruptured at first, the head would have fallen into the upper strait, and the child fallen a victim to its fatal compression there.

"If ergot alone had been given, either the object would not have been accomplished, or some grievous injury might have been inflicted on the mother. It is a very good rule in natural labour, 'not to give ergot until the os uteri is well dilated.' How much more should it be observed in these cases where no effort of nature has been made, and where labour has not even commenced!

"At any rate, the method adopted in this instance seemed to produce results nearly allied to those produced by nature herself, in carrying forward the same operation at the full period."—*New England Quarterly Journal of Medicine and Surgery*, April, 1843.

Strangulated Intestine from Rotation of the Sigmoid Flexure of the Colon. By JACOB BIGELOW, M. D.—The Hon. HUGH S. LEGARE, Attorney-general of the United States, arrived in Boston on Friday, June 16th, and although fatigued by a hasty journey from Washington, was well enough to make calls on some friends in the evening. At 1 o'clock in the night he was seized with frequent abdominal pains, resembling those of colic, and called Dr. Thomas, of Washington, then lodging in the same hotel, to his assistance. During the remainder

of the night, and the whole of the next day and night, he was affected with pains alternating with intervals of ease, without constitutional disturbance, and agreeing in character with those of previous attacks to which he had been liable for more than two years, the last occurring in March preceding. Various laxatives and enemata were resorted to, together with counter-irritants, but without removal of the constipation and pain.

Early on Sunday morning I was called to meet Dr. Thomas at Mr. L.'s lodgings at the Tremont House. I found him then suffering frequent paroxysms of pain, which he referred mostly to the lower abdomen, without distinction of side, but which sometimes mounted above the umbilicus. The pulse was at this time 60, the skin natural, with no tenderness on deep pressure of the abdomen in any part, no meteorism, no nausea. Opiates and other remedies were proposed to him, but declined, on the ground that laxatives and mechanical means had relieved his former attacks. During the morning two doses of Epsom salt, with infusion of senna and tincture of hyoscyamus were given, with frequent enemata both aqueous and stimulating, without effect. The pains did not increase, but a troublesome degree of tenesmus made it necessary to suspend the enemata. Elastic tubes were passed throughout the rectum, and water injected through them in the manner recommended by Dr. O'Beirne, but they could not be carried into the sigmoid flexure. His strength meanwhile remained good and his general condition stationary.

At 6 P. M. he was removed without difficulty to the house of a friend, where he was immediately put into a warm bath of 106 deg., from which he expressed great relief and satisfaction. He was then put to bed, and 60 drops of laudanum were administered in two doses. In about an hour, the relief not being perfect, 40 drops of McMunn's elixir of opium were given, soon after which he fell into a quiet sleep, and so remained for about three hours. Conditional directions were given for repeating the opiate, but it was not found necessary till near morning, when he took 20 drops of the elixir and slept an hour or two more. On Monday morning at 5 o'clock, I found him more comfortable than before, skin temperate, pulse 64, abdomen not tender but beginning to be tympanitic. Castor oil and senna, with hyoscyamus, were now given and retained, and enemata, fomentations and sinapisms were resumed as before. The pain did not return with the same severity as before, but meteorism rapidly increased, with restlessness and tenderness on pressure. At 9 A. M. the pulse was 80, and before 12 it was 100. The face of things having become very serious, Dr. Thomas being absent from the city, I requested farther consultation, and Dr. Warren was called in. The abdomen was freely leeched and rubbed with croton oil. Various ineffectual attempts were made to overcome the obstruction of the intestine by the introduction of various tubes, by inflation of the rectum with a bellows, and by the tobacco injection administered twice. Under this last remedy he said he felt excited, was stronger but more agitated, and his pulse rose from 130 to 140, with increased force. Each injection contained half a drachm in infusion, and was retained nearly half an hour without narcotism or prostration. During the night the patient was restless, retaining his muscular strength in a considerable degree, and frequently getting up to the close stool in the belief of an approaching evacuation. There was never any vomiting nor nausea; the mind was clear, and the natural decisive tone of voice continued. He complained occasionally of a sense of burning at the epigastrium and upper abdomen. About half an hour before death he got up without assistance, and on lying down asked urgently for water. On receiving it, he pushed it away, saying it was filled with ants. A white paper was then shown him, to which he applied the same remark. On being told it was an illusion of sight, he put forth his hand for the glass, but missed it, said a few words incoherently, leaned back, and expired quietly at half past five.

Autopsy seven hours after death.—Externally the limbs were very rigid, and there was much lividity about the head and back. The abdomen was greatly distended. On laying it open the cavity seemed nearly filled by the sigmoid flexure of the large intestine, which extended across the abdomen into the right hypochondrium, and was in a state of such distension, that its external circum-

ference was in one place fifteen inches. It had a dusky green colour, as if from commencing gangrene, but there seemed to be no softening, nor diminution of the natural polish. The two extremities of the flexure connected with the colon above, and rectum below, were felt to be twisted together about the mesentery as an axis, into a firm cord or neck, about an inch in diameter; and on being carefully untwisted, the whole included portion was found to have made four turns, or two entire revolutions upon itself. There was no line of demarcation between the healthy and strangulated portions, nor was there any appearance externally of old disease about this part. The small intestine and the colon were moderately distended, but the rectum was rather contracted. The cavity of the peritoneum contained a small quantity of turbid reddish fluid, and in one place there was recent lymph upon the small intestine, but there were no other appearances of inflammation. Owing to the state of the body and the place of examination, the intestine was not opened, and no further dissection made.

Remarks.—Internal strangulation, we have reason to believe, is a fatal disease except in rare instances in which a spontaneous restoration of the parts may under favourable circumstances have taken place. But the resources of art are for the most part unavailing, from our ignorance at the time, of the nature and place of the lesion, and from the inaccessible situation of the part, unless by a dangerous operation, not to be justified under any diagnosis which can be seasonably made out. Among the various causes known to have occasioned strangulation, the rotation or twisting of the intestine is less common than some others. Yet in addition to the case which has now been described, two others have occurred in this city, under the observation of Drs. Homans and J. B. S. Jackson, the record of which I have seen, in which fatal strangulation occurred from the torsion or twisting of the sigmoid flexure.

Professor Rokitsansky, of Vienna, in a work on internal strangulations of the intestines, divides these lesions into three species. Of these, the second species consists in the rotation of one part round an axis most commonly formed by some other part. It appears to be the result of his experience that rotation round the mesentery as an axis can happen only to the small intestine.* But it appears from the case above detailed, and the two others alluded to, that the large intestine is capable of undergoing this rotation, and from its anatomical position, no part seems more exposed to this change of situation than the sigmoid flexure.

From remarks made by Mr. Legare during his illness, it is believed that in some of his former attacks of colic and constipation, relief was obtained by the introduction of the elastic tube beyond the seat of the stricture. This happy result is to be ascribed to the spasmodic character of the obstruction then existing. But when the intestine is rendered impervious by mechanical strangulation, it is evident that an instrument would sooner perforate the coats of the canal, than admit of being forced through the closed and tortuous passage. In the present case, tubes, some of which were two feet in length, were introduced into the rectum, and water injected through them continually to facilitate their progress. But the more flexible tubes were bent into a coil in the rectum, and the more rigid ones were irresistibly stopped at the sigmoid flexure, and could not be further forced without danger of perforating the intestine, an accident well known to have followed injudicious and violent efforts.—*Boston Medical and Surgical Journal*, July 5, 1841.

Retained Placenta—Perforation of the Uterus. The following interesting case of retained placenta, followed by perforation of the uterus and death, was communicated to the Boston Society for Medical Improvement, on the 26th December last. By D. HUMPHREYS STORER, M. D.

"On the 7th instant, at 5 A. M., Mrs. G., aged 21 years, after a labour of a few hours, was delivered of her first child. It was very small, and I should judge not to be more than eight months grown.

* British and For. Med. Review, III. 496, 498.

"The uterus contracted well, but the placenta not being readily detached, I examined and found it firmly adherent, high up, to the uterus. After waiting several hours for its expulsion, I made an unsuccessful attempt to remove it by the hand. A small portion only was brought away. During the evening of the first day, my patient was seen by another practitioner, who also attempted to remove the placenta, with no greater success than myself, he being able to remove only a small portion, of the size perhaps of an olive. For the three first days my patient's symptoms caused me no alarm. During this period I administered \mathfrak{z} i. of ergot, in divided doses, and gave a cathartic of castor-oil. The lochia appeared, and continued to flow, and her breasts secreted milk. No pain nor difficulty was complained of—and although I visited my patient morning, noon, and evening, of each day, it was with the hope of learning that the placenta had been thrown off, and not with the expectation of finding her more sick.

"On the morning of the 10th inst., the commencement of the fourth day, I found the pulse had risen from 84 (which they were at 10 o'clock the previous evening) to 140. The abdomen was tympanitic, and pressure upon it produced considerable uneasiness; while distinct pain was caused in the uterus by the application of external force. The lochia and milk had disappeared, the respiration was hurried, and the countenance was distressed.

"Here was *peritonitis*—but how should I proceed? As in ordinary cases of this disease? What would be gained by *general bleeding*? The irritating cause would still be in the uterus, however much temporary benefit might be produced. I was unwilling to act alone—and Dr. Channing, in a few moments after my morning visit, saw my patient with me. He examined the uterus, but could remove nothing. After carefully investigating the case, he suggested the application of ten leeches over the region of the uterus, a hot Indian poultice to the remainder of the abdomen, and the continuance of injections of chloride of soda, which had been previously used, into the vagina. She seemed relieved during the afternoon—a Dover's powder was exhibited at night. In the morning she was decidedly better; the abdomen was less affected by pressure, and was less swollen; the pulse had fallen to 100; she had slept and perspired freely during the night. At noon of this, the 5th day, she was still more relieved, and could I have forgotten that the placenta was still in the uterus, I should really have felt that my patient would yet do well. In the afternoon of this day her pain gradually returned, and during the night it was mitigated only by opium. On the morning of the 6th day I found her in the greatest distress; the pain was intense. The tympanitis had greatly increased, and the respiration was laboured. During the whole forenoon of this day she suffered from constantly returning pains, after a longer or shorter intermission, which increased in their severity until they could scarcely be borne. These pains might readily be mistaken by a by-stander for labour pains. In the afternoon of this day her pains suddenly ceased, and did not again return; the distension of the abdomen increased, the respiration became more laboured, the pulse rose to 160, and she died the next evening.

"Upon examining the body after death, the fundus of the uterus was found to be in a state of ulceration, and projecting through it into the abdominal cavity, was seen a large portion of the placenta—the remainder still being contained within the cavity of the uterus. The body and neck of the uterus were not disorganized.

"The results of the two cases I have repeated to this Society show how great are the dangers to be feared from a retained placenta. In both cases I followed the advice of Blundell, and the dictates of my common sense—"to leave the placenta in the uterine cavity if it could not be removed without the risk of bruising or lacerating the uterus, not because it is not an evil to leave it there, but because to leave it in the uterus is a smaller evil than to abstract it with violence, and we had better abide by the smaller evil than expose ourselves to the greater evil, that of lacerating, bruising and killing."

"And in both cases the results were peculiar, and I feel could not have been averted.

"In the former case *tetanus* ensued.

"In the latter case, after the placenta had been retained for three days, attached to the fundus of the uterus, inflammation commenced—the parietes of the fundus became disorganized, and (probably on the 6th day) during a succession of severe uterine pains, gave way, and the placenta was partially protruded through them into the abdomen."—*N. E. Quart. Journ. Med. & Surg.*, April, 1843.

Spina Bifida successfully treated by repeated Punctures.—The following case of successful treatment of spina bifida, by Dr. ALEXANDER STEPHENS, is recorded in the second No. of the *New York Journal of Medicine and the Collateral Sciences*.

"October 17th, 1837.—An infant daughter of Mr. Leach, of Skeneateles, eight months old, was operated on by Dr. Stephens this morning for spina bifida. The tumour was seated over the upper part of the sacrum, about three and a half inches broad from side to side, nearly the same in a vertical direction, and rising about two inches above the surrounding surface, indented along the middle vertically by a thick irregular band of integument. The covering of the tumour was not healthy skin, but a peculiar thin membrane of a reddish colour, traversed by numerous vessels like varicose capillary veins. The healthy integument formed a hard edge at its line of union with the covering of the tumour. The whole swelling was somewhat pendulous, narrower at its base than about the middle, and in size held about the same relation to the size of the infant, as it did at the time of birth. It had been once punctured with a needle, when the child was only a few weeks old. The wound, which had never cicatrized fairly, is now covered with a sort of scab.

"In the operation to-day it was punctured with an iris knife, and about four ounces of clear serum tinged with a few drops of blood, issued from the puncture in the integuments. The child did not appear to suffer any inconvenience from the evacuation of serum, but it produced a slight sinking at the anterior fontanelle. The child's general health is good. There did not appear to be any deficiency of bone about the outer portion of the base of the tumour. The healthy integument mounted a few lines above the base, before giving place to the peculiar envelope above noticed.

"October 20th.—The tumour was again tapped on the right side. Not more than an ounce of serum escaped.

"October 21st.—The tumour was again punctured in three places along its lower edge on the verge of the sound skin. About four ounces of serum escaped without any bad symptoms. The tumour is now somewhat shrivelled, but the diminution does not appear equal to the amount of fluid evacuated.

"October 30th.—The fluid continued to ooze slowly for nearly twenty-four hours after the last punctures. Since that period, the child has been drooping and fretful, with some febrile symptoms, perhaps partly owing to her teeth. Recently, the sac of the tumour has become inflamed; and within two days, the child has been observed to keep her left leg drawn up, and to cry when it was disturbed. She has taken little or no medicine, excepting a slight dose of magnesia. The tumour is kept wet with a spirit-lotion. The anterior fontanelle is considerably depressed.

"The tumour was not punctured afterwards. The febrile symptoms and spasms of the muscles, soon subsided; and in a few days, the little patient returned with her parents to the country. At a second visit to the city in the spring, or summer following, the child was again presented to us for examination. The sac of water had disappeared, and all that remained of it, was a small bunch of indurated and corrugated integument.

"I think it important to state, that the fluid in the sac was discharged very slowly; at the rate of about three drops in a second, while about one-third of it was left behind; that slight pressure was made upon the tumour after each evacuation, and as far as was practicable in a restless child, maintained there; and that strict injunctions were given to keep the body in a horizontal position. Once,

when the head was suddenly elevated, soon after the tumour had been evacuated, a tendency to syncope and spasm was manifested, which disappeared as soon as the child's head was depressed.

Remarks.—Considering the analogy between spina bifida and hydrocele of the tunica vaginalis testis, and other serous sacs, we may anticipate a thickening and induration of the sac, with a corresponding degree of contraction in the former case, as well as in the latter. The desideratum then is, to open the sac and draw off the fluid safely. This leads to the inquiry—What are the dangers of the operation?

The first danger is the producing of syncope and spasms, by the too sudden removal of the pressure of the fluid upon the serous cavities in the ventricles and spinal marrow. The means of obviating this danger are, drawing the water off slowly, leaving some in the sac undischarged, keeping the patient in a horizontal position, and if necessary, making pressure upon the tumour and upon the head. With these precautions and resources, this danger cannot be deemed a formidable one.

The next danger of which I shall speak, is the occurrence of inflammation of the inner lining of the sac, extending peradventure to the spine and cerebral cavities. There was a period of two or three days of restlessness and feverishness in Mr. Leach's child, which I attributed to this cause, but which disappeared without any particular treatment. Of course, no prudent surgeon would repeat the puncture, until the effects of the previous operation had subsided.

The next question of which I shall speak, is of an entirely different kind, and I infer the possibility of it only from analogy, reasoning from what occurs in some cases of paracentesis abdominis; that is, an habitual increased secretion produced by repeatedly drawing off the water. I should judge, that such a state of things was to be obviated by increasing the degree of inflammation, and of course the thickening and contraction of the sac, after each puncture, by pressure sufficient for the purpose.

These considerations lead me to conclude, that the puncture of spina bifida may be made with very little danger and a fair prospect of success.

Measurements of the Fœtal Cranium.—At the Celebration of the Hundredth Anniversary of the American Philosophical Society, Dr. CHARLES D. MEIGS read an interesting communication on the measurements of the fœtal cranium, and presented a tabular statement of the measurements of one hundred and fifty heads of children, born *at term*, in the city of Philadelphia. It appeared from this:—

1. That the sum of his measurements of the occipito-frontal diameter was 729 inches, 7 lines; the mean 4 inches, 10 lines.

2. That the sum of his measurements of the bi-parietal diameter was 586 inches, 7 lines; the mean 3 inches, 11 lines.

3. That in 52 children, the occipito-frontal diameter was more than 5 inches, in 11 it was 5.1, in 8 it was 5.2, in 3 it was 5.3, in one 5.4, in one 5.6, in two 5.7, and in one 5.10.

4. That in 68 the bi-parietal diameter exceeded 4 inches, in 19 it was 4.1, in five 4.2, in six 4.3, in three 4.4, in one 4.5; in only one case was it less than 3.6: in that it was 3.4.

5. That the mean horizontal circumference of the head was 13.8, and the small or perpendicular circumference 11.5.

Dr. Meigs concluded with remarking, that perhaps in an ethnographical relation his measurement might possess a certain interest. It would be curious to preserve, from century to century, some accurate registers of the kind; and he ventured to hope, that upon many succeeding centennial sessions of the American Philosophical Society future members might be induced to present similar records.—*Proceedings of the American Philosophical Society.*